

DOCUMENT RESUME

ED 272 001

FL 015 863

AUTHOR Cramer, Hazel
TITLE Computer Assisted Instruction: The Game "Le Choc des Multinationales."
PUB DATE May 85
NOTE 13p.; In: Proceedings of the Eastern Michigan University Conference on Languages for Business and the Professions (4th, Dearborn, MI, May 2-4, 1985); see FL 015 835.
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Banking; Business Administration Education; Business Communication; *Computer Assisted Instruction; Courseware; *Economics; *French; *Games; *International Trade; *Languages for Special Purposes; Microcomputers; Second Language Instruction

ABSTRACT

"Le Choc de Multinationales" is a microcomputer game for students in an upper-level commercial French course, to be played by two opponents, one of whom may be another student or the computer itself as a direct business competitor. The game's requirements for language use and knowledge of business and economics theory and principles are moderate, but the game uses basic economics, international trade, and banking vocabulary and concepts. During the game, which revolves around economic competition, students are required to answer multiple-choice questions or respond to questions posed in French. World news events affecting the economics of the game are randomly reported. The game provides practice in applying business strategies, making decisions, and handling the stockholder-manager conflict of interest. It demands high-level cognitive activity, and it engages the student in an interactive situation in which language study is not the primary focus but in which interesting and relevant subject matter is studied using the second language as a means of communication. (MSE)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED272001

COMPUTER ASSISTED INSTRUCTION:

THE GAME "LE CHOC DES MULTINATIONALES"

By

Dr. Hazel Cramer

Department of International
Communication & Culture

State University of New York at Cortland

Cortland, New York

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as
received from the person or organization
originating it.
- ☐ Minor changes have been made to improve
reproduction quality.

- Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

G. Wright

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

FL 015863

Computer Assisted Instruction: The Game "Le Choc des
multinationales"

Technology's promises are enticing, but many foreign language teachers, inundated by glossy brochures guaranteeing student success if only the school will purchase the requisite computer software and hardware, remain skeptical. The attitude is certainly understandable. Teachers of second languages know that language laboratories make a specific, positive contribution to learning, but labs did not revolutionize the field in quite the way that early promoters suggested that they would. We are now discovering that satellite dishes provide access to television programs heretofore unavailable; however, videotapes, like films, cannot be used in the classroom without extensive preparation on the teacher's part. Experience has proved that new technologies make demands on the teacher and tend to take time rather than save time, and we are all too aware that the introduction of a new medium does not automatically insure student success.

Yet there are sound reasons to embrace computer assisted instruction. Teachers find that students who are not enthusiastic about doing homework, learning verb forms, or studying vocabulary will quite willingly practice if questions appear on a screen rather than in a workbook. The use of computer equipment is now no more threatening than starting a car: understanding how the computer works is no more necessary than exploring the intricacies of fuel-injected engines. The vast array of available software programs is certainly worth exploring. What the teacher discovers, however, is that rather than being overwhelmed by the

CHOC, p. 2

wonders suddenly available, he or she is surprised to see how very limited most commercially available programs are. Teachers remain the best judges: they know what their classes know, and they can quickly determine how relevant or productive any software package will be. Correlating what a software package has to offer with course objectives thus becomes one of the primary concerns of the teacher who is reviewing software.

The game "Le Choc des multinationales" is one of the few computer-based exercises that appear to fit into the curriculum of an upper-level commercial French course and that seem to help meet the commercial course's goals. The object of the game is to be the player with the highest score, that is, the player who has greatest amount of personal equity when all turns have been taken. The opponent may be another player or the computer itself.¹ A player's personal equity is always equal to the number of shares of stock currently owned by that player multiplied by the current stock price. Players, who are both stockholders and presidents of their own multinational corporations, increase their personal equity principally through the clever purchase and sale of stock and by buying other companies, known as subsidiaries, preferably with borrowed funds at low interest rates.

Whether or not the game will complement the commercial course depends entirely on the focus and scope of that course. So many aspects of study are implied by the notion of a commercial course that many different areas of study might be included in,

CHOC, p. 3

or excluded from, a given course. A course dealing with banking terminology, for example, may or may not have an historical component; learning to write letters may or may not be a segment of a course that treats the economic conditions of modern France. The game in question, "Le Choc des multinationales," will complement a course in which the student studies terms and concepts like the following: base earnings, book value, capital stock value, earned interest, interest on deposits, loan interest, loans outstanding, price/earnings ratio, personal equity, prime rate, projected net income, public companies unowned, stock price per share, subsidiary earnings, value of subsidiaries, and yield. These, in fact, are the game's key terms.

In a strict sense, the demands made in the game related to the use of the French language are moderate. A six-page pamphlet written in French that accompanies the computer diskette includes computer set-up directions, rules of the game, game play options, a glossary of key words, and a brief commentary on optimal strategy. While playing the game, students must both choose from among the options presented to them and answer the questions posed to them in written French by the computer. In addition, during the game, a number of World News Events, randomly generated by the computer, will be reported to the player. These usually involve two, three, or four sentences about various events that positively or negatively impact the profitability of the player's corporation, events such as strikes, technological

CHOC, p. 4

breakthroughs, and legal disputes. In order to play the game, however, the minimum French that the student must know includes the terms used in describing the rules of the game, the sixteen key terms defined in the glossary and listed above in English, and the two dozen or so terms used by the computer to present options and ask questions. Questions, furthermore, are typically answered with one keystroke-- by typing "O" or "N" for "oui" or "non" (yes or no) or by typing a number, for example 1 for "buy stock," 2 for "sell stock," or 3 for "repay loans." Consequently, students do not need to be fluent-- that is, they do not have to be able to generate meaningful sentences-- to play the game.

Likewise, to play the game, students do not need to have had an extensive education in the theories and principles of business and economics. Players do need to understand the relationship between the price-earnings ratio and stock value to understand what their stock is worth and to be able to read the report the computer gives them when they ask about their company's current financial status. Players should understand the bases for calculating their company's projected net income, a statistic helpfully supplied by the computer. Players must understand what the "discount rate" is and what the term "interest on deposits" means. They need to understand the meaning of the figures in the "yield" column when evaluating subsidiaries for possible purchase. These concepts are requisite for a minimal level of play. To be sure, students who are not versed in the theories of Corporate Finance, Financial Management, Accounting,

CHOC, p. 5

and Management Strategy and Policy will be at a disadvantage. One of the great benefits of this game, however, is that students not formally trained in the aforementioned disciplines will quickly gain an intuitive understanding of some of their major principles and concepts simply by trying to win the game.

Specifically, successful players of the game will learn the advantages and disadvantages of leveraged buy outs. They will come to comprehend the effects of the price/earnings (P/E) ratio, interest rates, debt, and earnings on stock prices. They will understand the interrelationship between financial management, market conditions, and corporate acquisitions of subsidiaries. Finally, concepts like book value, price/earnings ratio, projected net income, prime rate, and personal equity will become meaningful as the player sees the effects of the interaction of these variables.

With practice, students will learn a great deal about optimal corporate strategy as well. For instance, they will see that it is best to sell (buy) stock when the price-earnings ratio is high (low) and interest rates are low (high). They will find that they can in general enhance their personal equity by increasing their corporation's earnings through purchases of profitable subsidiaries with borrowed funds at low interest rates. The more astute players will rapidly realize the benefits of acquiring stock in their own corporations just prior to acquiring a profitable subsidiary. Another strategy to increase personal equity whose value will become clear is to buy stock

CHOC, p. 6

before repaying loans, especially when the interest rate is high. Students will learn defensive strategies, too, such as occasionally buying subsidiaries under less than ideal conditions just to foil an opponent's prospective takeover bid.

And lastly, the game elucidates one of the classic conflicts between stockholders and corporate managers: what is best for the corporation from the manager's point of view (high book value) is not always best for the stockholder (high personal equity), and vice versa. The important role of uncertainty in business decision-making is also clearly revealed. After each turn in the game, the computer randomly selects values (within reasonable limits) for the price-earnings ratio, the prime rate, and the interest rate earned on deposits. In addition, World News Events of great portent for the player's eventual success or failure are randomly interjected. The result is that a theoretically optimal strategy can be undermined and may lead to a poor overall performance, while a theoretically sub-optimal strategy may be crowned with success-- much like in the real world!

In sum, the game has obvious educational value. In particular, it promotes an intuitive understanding of numerous principles of business and economics. Others agree with us: the game has been used at the Harvard Business School, in the Wharton MBA program, and at many other colleges and universities. The challenges to the players, however, come from the manipulation of concepts in business and economics and not from the testing of their French language abilities.

CHOC, p. 7

The conclusion suggested by our last statement may seem to be that the game has little to offer. Quite the contrary, it is our contention that the game can make a very positive contribution to the student's learning precisely because of the bases for its challenges. A number of theorists who study the teaching of foreign languages have proposed that learning is most effective when language study per se is not the student's objective, but when the student is studying subject matter of interest to him or to her in the second language. Steven Krashen proposes that language skills are developed when the student is exposed to what he has termed "comprehensible input." The language acquisition process then functions.² Elementary-level immersion programs also propose this principle: the student's acquisition of the language happens automatically as subject matter like mathematics, social studies, etc., is studied in the target language. Certainly, the student who plays the game "Le Choc des multinationales" quickly starts concentrating on the economic principles and variables that must be manipulated for the game to proceed, and the use of the French involved becomes both secondary and automatic. The element of repetition, too, helps: the same phrases in French recur. As a consequence, the game not only has the effect of providing a stimulus to use the target language to communicate a message, but in addition, key phrases are reiterated a sufficient number of times for the student to acquire them.

To restate the case for the use of the game, one can make

CHOC, p. 8

reference to a powerful tool that helps clarify why some instructional computer programs seem intuitively to be so much more useful than others, namely Bloom's taxonomy of cognitive levels. The terms used by Bloom to describe his categories are the following:

- (1) Memory- to memorize, to repeat, to recall, to list
- (2) Comprehension- to transfer, to restate, to interpret
- (3) Application- to apply a rule, to use knowledge
- (4) Analysis- to take apart, to compare, to criticize, to examine, to solve
- (5) Synthesis- to put together, to originate
- (6) Evaluation- to judge, to form an opinion

It is clear that the mental activity required to play "Le Choc des multinationales" falls on the high range of the scale. The taxonomy is useful because it helps explain why so much available software feels disappointing: any software that remains at the first level, memory, is limited and, ultimately, dissatisfying.³ There is, to be sure, a role for memory-based drills in foreign language acquisition. However, when the first level is the highest level that is reached and the sole focus of an activity, the activity will not remain interesting for long. Furthermore, a person who has memorized discrete items is far from being able to use the language for communication; therefore, what a software package that remains at the level of memory has to offer is not consonant with the overall goals of a language program. The initial reaction of many foreign language

teachers to their first software program is "Is that all it can do?" Using Bloom's taxonomy as a tool of analysis accounts for that reaction and provides the teacher with a means for evaluating a software program.

In sum, two possible criteria for evaluating a program are the following:

(1) The program should require comprehension, application, analysis, or synthesis; it should not deal solely at the level of memory.

(2) The program should engage the student in an interactive situation in which the study of the language is not the primary focus, but in which some subject matter of interest and relevance to the student is studied using the second language as a means of communication.

Using these two criteria as the basis for judgment, one may say that the game "Le Choc des multinationales" is indeed worthwhile for students whose knowledge and temperament will allow them to enjoy the buying, selling, and decision-making that managing "their" company requires. In addition, using the two criteria as a tool will help second language teachers evaluate other software packages and to decide what role the software can play in meeting course objectives. So long as the class and the teacher understand exactly what contribution the software can make, computer assisted instruction will be a valuable asset. Until interactive video run by computer and accompanied by voice synthesizers is widely available, it is likely that

CHOC, p. 10

computer assisted instruction will play a complementary role to regular course instruction, in some respects similar to the role of sound tapes. But recognition of the positive contribution that software can make, with acknowledgment of its limitations and understanding of the level of mental activity involved, should encourage second language teachers to explore what this technology can offer their programs.

Dr. Hazel Cramer,
Department of International Communications
and Culture

Dr. Robert M. Lynch,
Economics Department

State University of New York College
at Cortland

FOOTNOTES

¹The player of this game in fact has three options: to play alone, to play against another person, or to play against the computer. On the diskette that we purchased, only option three works. That fact does not vitiate the game's value, especially since we found that option to be the most interesting. It does, however, reinforce rule one of buying computer software for educational use: buy the program on approval if possible and try the game or drill yourself to be sure that the program works as promised and that the quality of the target language is good.

See below for addresses for purchasing this software, originally published in the English version "Conglomerates Collide."

²Stephen D. Krashen Principles and Practice in Second Language Acquisition Oxford: Pergamon Press, 1982.

³For these insights about the relationship between Bloom's taxonomy and the interest of software we are indebted to Harry Grover Tuttle, North Syracuse School District, North Syracuse, New York. His article "Computers in the Modern Language Classroom," published in the The New York State Association of Foreign Language Teachers Bulletin, Vol. XXXII, No. 5, May, 1981, pp. 1-5, provides information about authoring programs as well as an overview of possible uses of programs.